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Public Perceptions of the Midwest's Pavements - Introduction

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Public Perceptions of the Midwest's Pavements - Introduction. Milwaukee, WI, Marquette University,
Department of Civil, Construction, and Environmental Engineering (2000).

The “*Public Perceptions of the Midwest’s Pavements*” is the largest survey of public perceptions of satisfaction and improvement policies on rural, two-lane highways ever conducted in the 20th Century in the USA. The project was a Pooled Fund effort undertaken by the Wisconsin DOT and included equal participation of the Iowa and Minnesota DOTs. Approximately 4500 drivers and over 1000 highway segments were surveyed in the three states in all three phases of the project, between 1996 and 2000.

The surveys included improvement policy and construction alternative issues and trade-offs, as well as surveys of beliefs and attitudes of the public that affect public trust and satisfaction. The results of the project are reported in phase reports (pdf), with a report on each phase in each state.

Phase I reports included results of focus groups held in six cities in each of three states. In addition, a special winter ride report was undertaken in Minnesota and Wisconsin. All five reports are included under Phase I.

Phase II reports for each state deal with the responses to telephone surveys with over 90 questions regarding highways regularly driven by respondent drivers in each state. The surveys included questions on satisfaction, trust, improvement issues, construction delay and detours, and trade offs regarding improvement strategies. Preliminary threshold data is developed using physical pavement indices of ride and condition in each state. A psychological model is applied for the first time in the highway field to explain the extensive variables that explain satisfaction.

In Phase III, targeted surveys of over 450 highway segments selected by the three states were undertaken, and 2300 participants who live in close proximity to the highways were recruited, to drive and report perceptions from the experience. Results are correlated to each states physical indices and thresholds of ride and condition index are developed for use by the states in improvement planning on rural, two-lane highways. The psychological model developed in Phase II was again applied in Phase III and performed better, explaining as much as 70 percent of the variance in satisfaction, a high degree for the social sciences.

Finally, this web site contains reports in pdf format of the Executive Summaries of each state’s results in all three phases. It is suggested readers start with the Executive Summary report of the state of interest. Details of such things as the survey questions for each phase are found in the phase reports, also contained in pdf format on this web site. Although the results are useful in each state, the details in the Executive Summary reports, and the phase reports, will allow any state to apply the techniques developed in this project to conduct similar research using data in the state’s pavement management systems. Details about the project may be obtained by email from the Principle Investigator, David A. Kuemmel, at

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